

# REGISTER OF THE TIDES AT HIGH AND LOW WATER BY TIDE STAFF N<sup>o</sup> 1. IN CAPE COD HARBOR, FOR THE MONTH OF JUNE 1835.

Elevation of the Highest Tide registered throughout the Survey being on the 13<sup>th</sup> of Oct. 1833 after a 24 hours hard gale from the South East.

Level of Mean High Water deduced from 634 registered High Tides.

Mean Flow of Tides 9.264 feet.  
Flow of Spring Tides 13.87 feet.

Level of Mean Low Water deduced from 569 registered Low Tides.

Plane of Reference. The Low Tide of Jan'y 27<sup>th</sup> 1834 after a days hard N.W. Gale being the lowest Low Tide registered throughout the Survey.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
S. S. W. Fresh; Rain. 0.35 12.85	N. W. Mod. Clear. 0.32 12.83	W. Mod. 0.30 12.81	W. b. S. Strong. 0.28 12.79	E. N. E. Gentle. 0.26 12.77	S. S. E. Mod. 0.24 12.75	S. W. Gentle. 0.22 12.73	S. W. Gentle; Thick fog. 0.20 12.71	S. W. Strong; Foggy. 0.18 12.69	S. W. Strong. 0.16 12.67	S. W. Gentle. 0.14 12.65	S. S. W. Mod. Clear. 0.12 12.63	S. W. Strong; Thick fog. 0.10 12.61	S. W. Gentle; Rain & Fog. 0.08 12.59	S. W. Mod. 0.06 12.57	S. W. Strong. 0.04 12.55	N. W. Very Light; Rain. 0.02 12.53	N. W. Very Light; Clear. 0.00 12.51	S. W. Gentle. 0.00 12.49	S. W. Strong; Cloudy. 0.00 12.47	S. S. W. Fresh Gale; Rain. 0.00 12.45	X. W. b. W. Strong; Clear. 0.00 12.43	X. W. Gentle; Clear. 0.00 12.41	S. W. Strong. 0.00 12.39	S. W. Gentle. 0.00 12.37	S. S. W. Gentle; Cloudy. 0.00 12.35	S. E. Gentle; Foggy. 0.00 12.33	E. Gentle; Foggy. 0.00 12.31	S. Mod. 0.00 12.29	S. S. E. Gentle; Clear. 0.00 12.27
0.38 12.85	0.35 12.83	0.33 12.81	0.31 12.79	0.29 12.77	0.27 12.75	0.25 12.73	0.23 12.71	0.21 12.69	0.19 12.67	0.17 12.65	0.15 12.63	0.13 12.61	0.11 12.59	0.09 12.57	0.07 12.55	0.05 12.53	0.03 12.51	0.01 12.49	0.00 12.47	0.00 12.45	0.00 12.43	0.00 12.41	0.00 12.39	0.00 12.37	0.00 12.35	0.00 12.33	0.00 12.31	0.00 12.29	0.00 12.27







# REGISTER OF THE TIDES AT HIGH AND LOW WATER, BY TIDE STAFF N<sup>o</sup> 1, IN CAPE COD HARBOR, FOR THE MONTH OF OCTOBER 1833.

Mean Solar Time of High and Low Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Surface of the Sea at Low Water	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Flow of Tides	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	E. S. E. Strong	
Direction and Force of Winds	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	N. E. Wind Fresh gales Clear	
Surface of the Sea at High Water	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00

## NOTE

The heights of the eminences on land, and also the Soundings throughout this Chart, are laid down with reference to Mean Low Water derived from a mean of 569 registered low tides within Cape Cod Harbor, and 123 registered low tides at Race Point. These dimensions are all expressed in FEET and decimals of FEET. To obtain the depth at Low water of Spring Tides, *Subtract* 2 feet from the soundings here laid down.

To ditto ditto Neap Tides, *Add* 1 foot & a half to ditto

To ditto at High water of Neap Tides, *Add* 7 feet & a half to ditto

To ditto at ordinary High water, *Add* 9 feet to ditto

To ditto at High water of Spring Tides, *Add* 11 feet & a half to ditto

Cape Cod Light from a number of Astronomical observations made by Robert T. Paine Esq. is in

Race Point Light from the results of this Survey, is in

Long Point Light from the results of this Survey, is in

The Magnetic Variation determined by Astronomical Observations on this Survey is 9° 20' West. (September, 1835)

NORTH LAT.	LONG. FROM GREENWICH
42° 02' 19"	4° 40' 17.5"
42° 03' 38.6"	4° 41' 01.1"
42° 01' 55"	4° 40' 43.3"

## REFERENCES

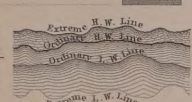
Points fixed by triangulation upon the land (being 150 in number) are represented thus. ○

ditto upon the water for regulating the soundings (being 606 in number) thus. △

Wind mills for working salt pumps are represented thus. ×

Salt works for making salt by evaporating sea water are represented thus. □

The flow of tide, or horizontal space included between the High and Low water lines, is represented thus.

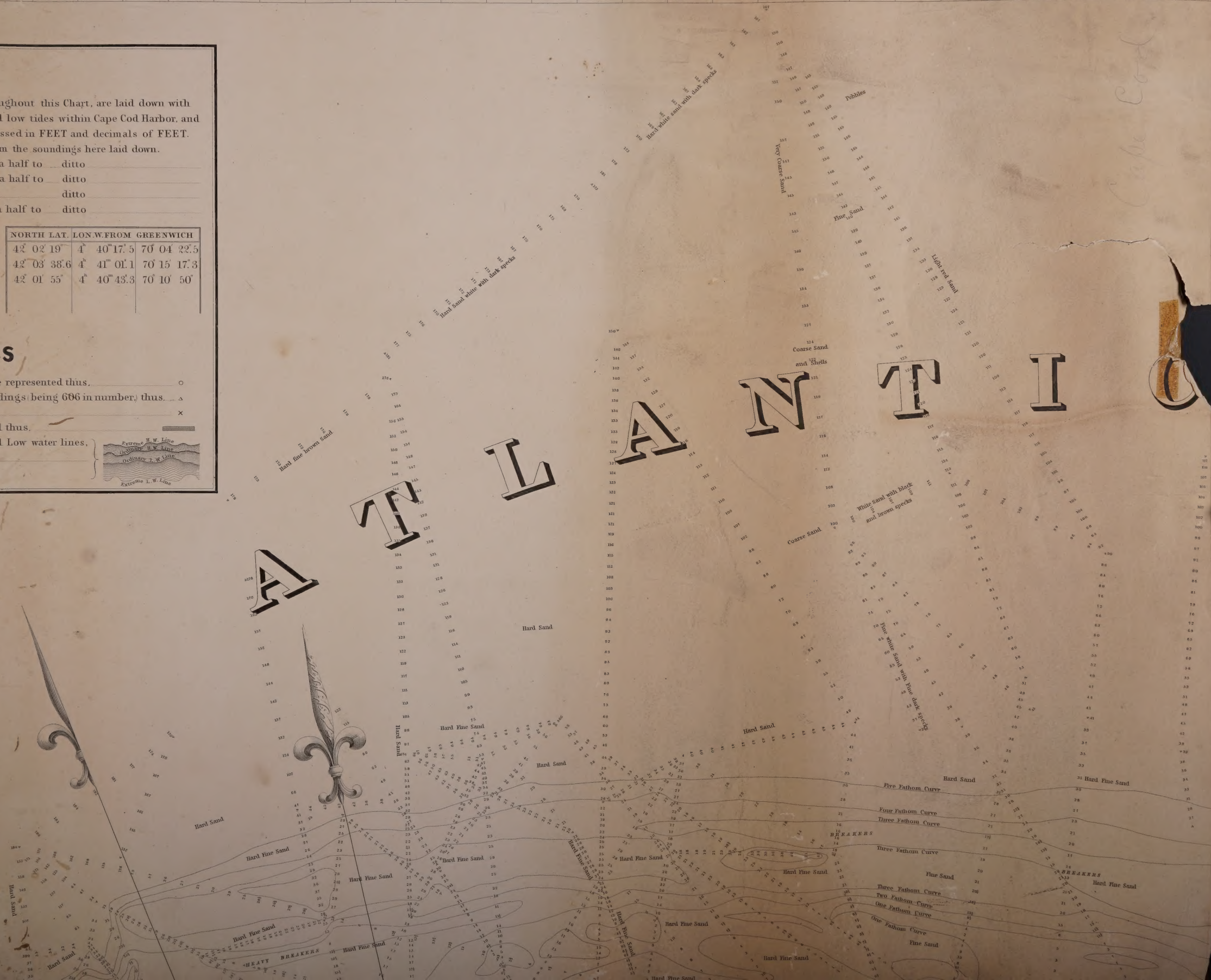


## NOTE

This Harbor affords every convenience as a watering station for shipping, the greatest abundance of pure fresh water being obtained in the village of Provincetown from wells sunk in the sand.

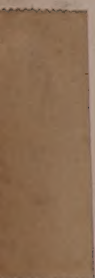
The Original Chart, on a scale of 3300 or 12 inches to 1 mile, submitted to Lieut. Colonel J. J. Albert, Chief of the Corps of Topographical Engineers, with a report dated December 21<sup>st</sup> 1835.

J. D. Graham  
Lieut. Col. Top. Eng.





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DRAWN FROM THE ORIGINAL  
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Reduced from the original in the Bureau of  
U.S. Topographical Engineers, Washington, by  
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